Manitoba Agricultural Review 1988

Manitoba
Agriculture
Economics

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DATA SOURCES: Agriculture Canada
Farm Credit Corporation
Manitoba Agricultural Credit Corporation
Manitoba Agriculture
Manitoba Bureau of Statistics
Manitoba Hydro
Statistics Canada
Western Canada Fertilizer Association

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MANITOBA AGRICULTURAL REVIEW

INTRODUCTION

The major focus of this publication is on primary agriculture. However, farming obviously cannot exist in isolation. It is an integral part of the total agriculture-food system which also includes manufacturing, processing, transportation, distribution and wholesale/retail trade. Agriculture makes an important contribution to Manitoba's overall economic activity, both in its production and consumption. Between 1985 and 1988, agriculture and related industries contributed an average of 13.0 per cent to the provincial Gross Domestic Product. In Manitoba, one job in seven depends on agricultural production. In addition to stimulating local employment, agriculture in Manitoba is directly responsible for about 26,000 jobs in other parts of Canada.

PRIMARY AGRICULTURE

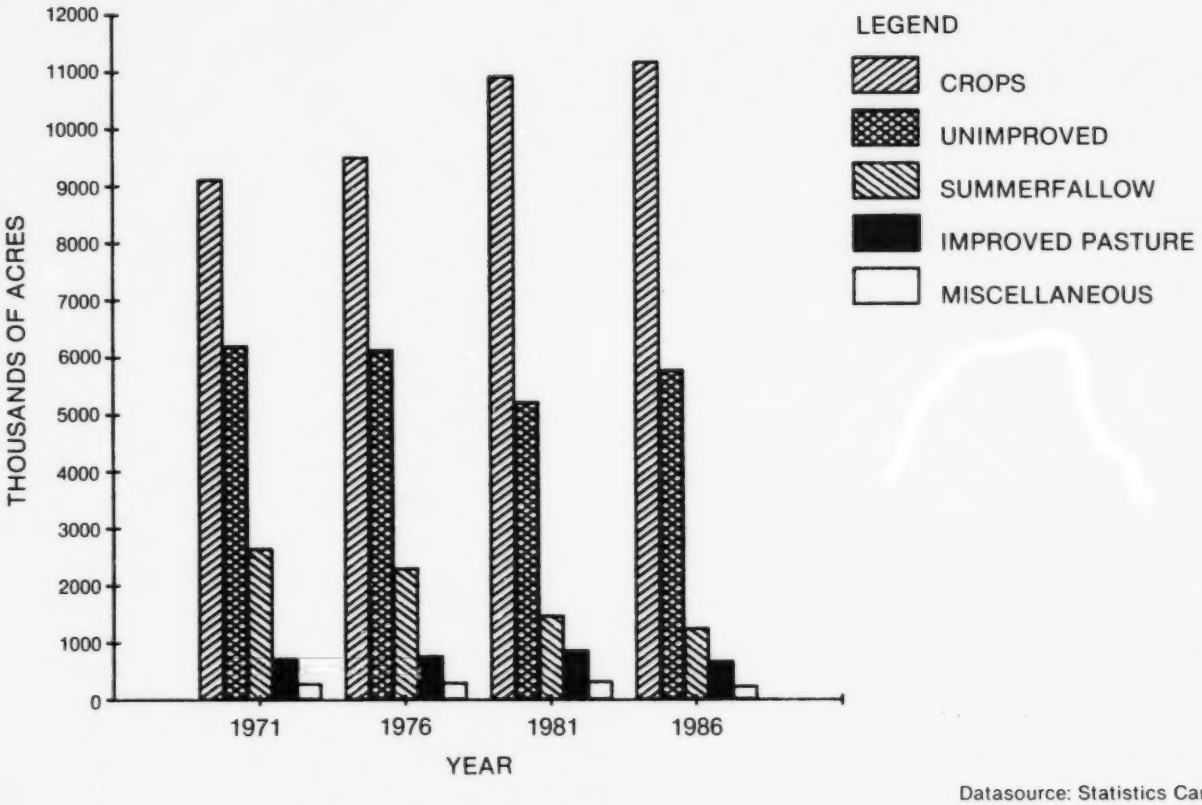
LAND RESOURCE

Manitoba extends 1 225 kilometres (761 miles) from the U.S. border to the Northwest Territories. Its area is 67.6 million hectares (167 million acres). The total land area is 54.8 million hectares (135.5 million acres), of which 14.6 million hectares (36.2 million acres) or 26.7 per cent have some agricultural potential. Over 9.6 million hectares (23.6 million acres) of this area are nonorganic soils; 5.4 million hectares (13.4 million acres) of these are suitable for sustained annual production of cultivated crops. Land use for agriculture in 1986 (both improved and unimproved land) totalled 7.7 million hectares (19.1 million acres), or over 50 per cent of total lands with agricultural potential. In 1988, 4.7 million hectares (11.6 million acres) were seeded to crops, 0.4 million hectares (1.1 million acres) were summerfallowed and 0.3 million hectares (0.7 million acres) were improved pasture lands.

Further opportunity to expand the agricultural land resource base through greater use of organic soil areas exists. Approximately 5.1 million hectares (12.6 million acres) of organic soils are in the non-permafrost or fringe agricultural zone of Manitoba. Potentially 0.6 million hectares (1.5 million acres) of these soils could be used for grain or special crop production. Another 0.2 million hectares (0.5 million acres) of organic soils could be easily developed and brought into forage crop production. About 0.2 million hectares (0.5 million acres) of organic soils are currently under cultivation.

GRAPH 1

LAND USE
1971 - 1986



Datasource: Statistics Canada

FARMS AND FARMERS

In 1986 Manitoba had 27,336 farms with sales of $250 or more. The average farm size was 283 hectares (700 acres). The number of farms declined by 7.2 per cent between 1981 and 1986, reflecting the continued trend towards farm consolidation. In 1986, 63 per cent of Manitoba farmland was operator-owned, while 37 per cent was rented land. The area of rented land had increased by 350 000 hectares (886,000 acres) or 14 per cent since 1981.

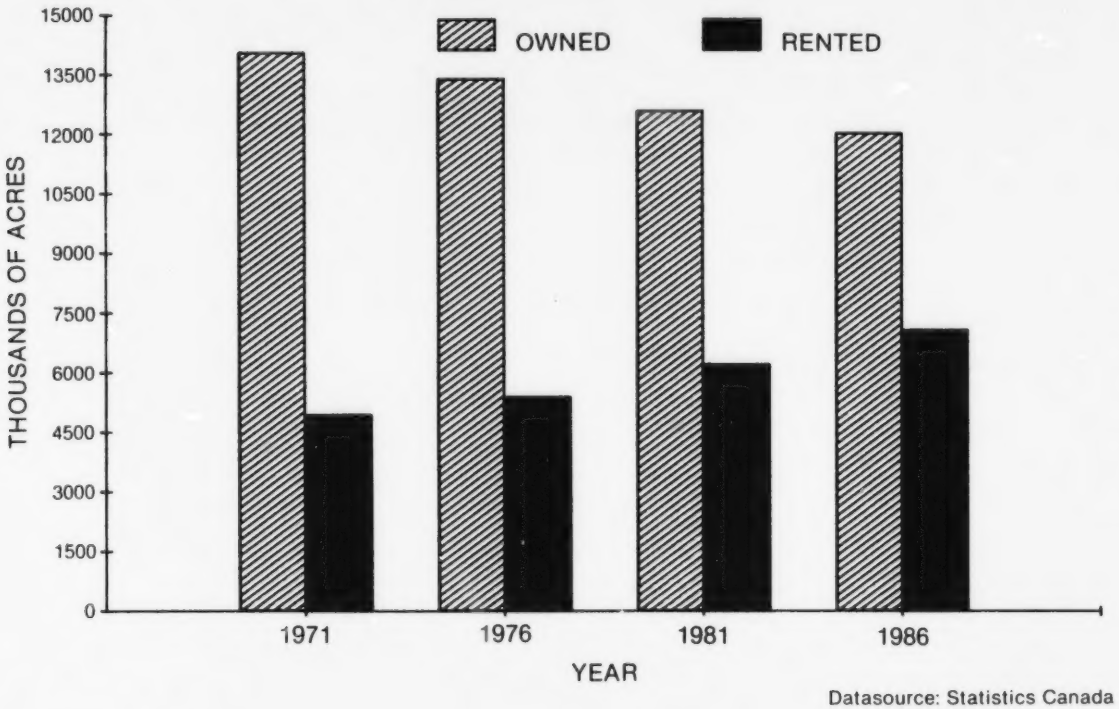
The 1986 Census of Agriculture showed that 22 per cent of farm operators were less than 35 years old, a decrease of three percentage points from the 1981 level. Eleven per cent were 35 to 39, 33 per cent were 40 to 54, and over 33 per cent were 55 years and over. In 1981, 30 per cent of farmers were over 55 years. Although the total number of farm operators declined between 1981 and 1986, the number of producers with sales of $10,000 or more was the same in both years. The total farm population in 1986 was down 14 per cent from the 1981 level. Approximately one Manitoban in 13 lived on a farm in 1986 compared with one in ten in 1981.

The 1986 Census showed that Manitoba farmers hired a total of 342,706 weeks of full-time and part-time labour. This represents a 38.3 per cent increase in the number of weeks of hired labour since 1981, and a 28.7 per cent increase in the number of farms reporting hired labour. Over 51 per cent of hired help was employed on a part-time basis. In general, a shift away from year-round hired labour to more seasonal task-specific term employment was evident.

In 1986, farm operators worked 1,536,485 days off the farm, a decrease of 4.3 per cent from 1981. During this period, although the number of farms where the operator reported off-farm employment decreased by 5.7 per cent to total 9,714 in 1986, the proportion of all farms with the operator reporting off-farm work increased from 35.0 per cent in 1981 to approximately 35.5 per cent in 1986. Off-farm employment by Manitoba farmers is common and could continue to expand as labour requirements of the farm decline and as economic conditions pressure producers to find supplementary sources of income. Beginning farmers may also use this as an alternate way of entering full-time farming.

GRAPH 2

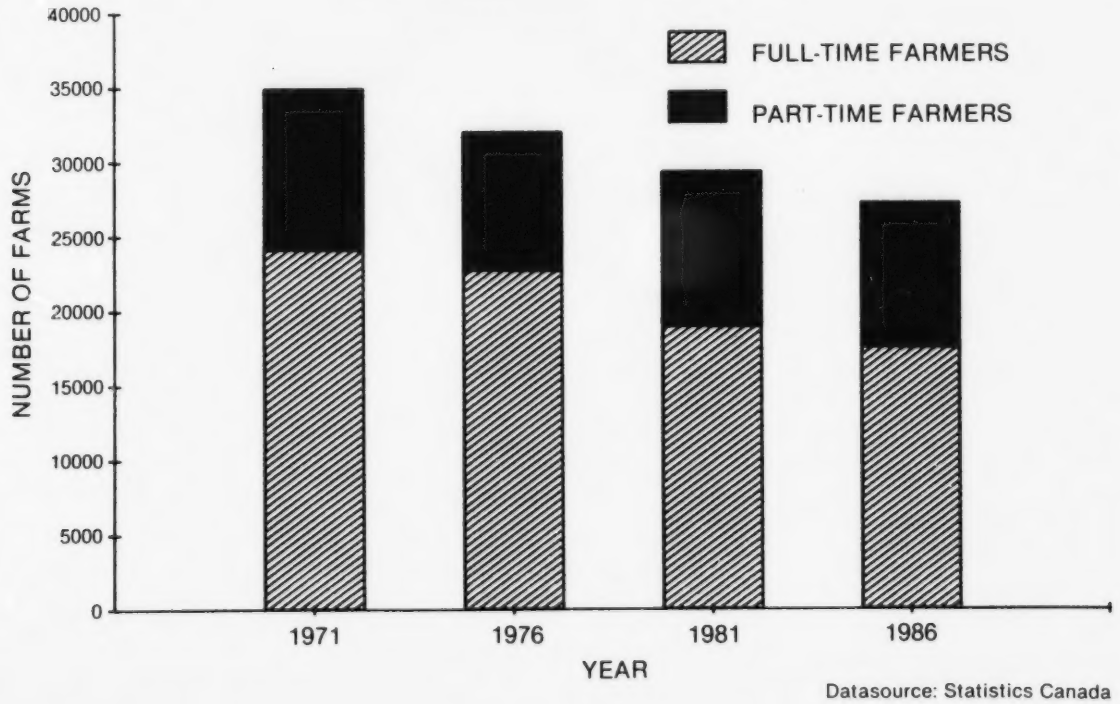
TENURE STATUS OF FARMLAND 1971 - 1986



Datasource: Statistics Canada

GRAPH 3

FARMS CLASSIFIED BY WORK STATUS OF OPERATOR, 1971 - 1986



Datasource: Statistics Canada

FARM INCOMES

Farmers have very little contol over the prices they receive for most of the commodities they produce. Increasing production costs, dependence on the weather and variable commodity prices make farming a risky business. Realized net farm income (cash flow) in Manitoba increased from $278 million in 1985 to $419 million in 1986 and $466 million in 1987, but decreased to $428 million in 1988. Preliminary projections indicate that despite further government assistance to grain producers, farmers will net only $280 million in 1989, a decrease of 35 per cent from a year earlier.

Total net income (net cash income adjusted for inventory change) per farm was $13,900 in 1981. This fell to $1,805 per farm in 1983 and peaked at $19,562 per farm in 1985 due to bumper crops and an inventory build-up. In 1986, total net income averaged $14,034 per farm, due in part to reduced on-farm inventories. Lower grain and oilseed receipts were offset by lower production costs and increased government payments to keep total net income at $14,190 per farm in 1987. Reduced cash receipts and on-farm inventories and higher depreciation are expected to result in a drop in net farm income to $7,170 per farm in 1988.

FARM FINANCIAL DIFFICULTIES

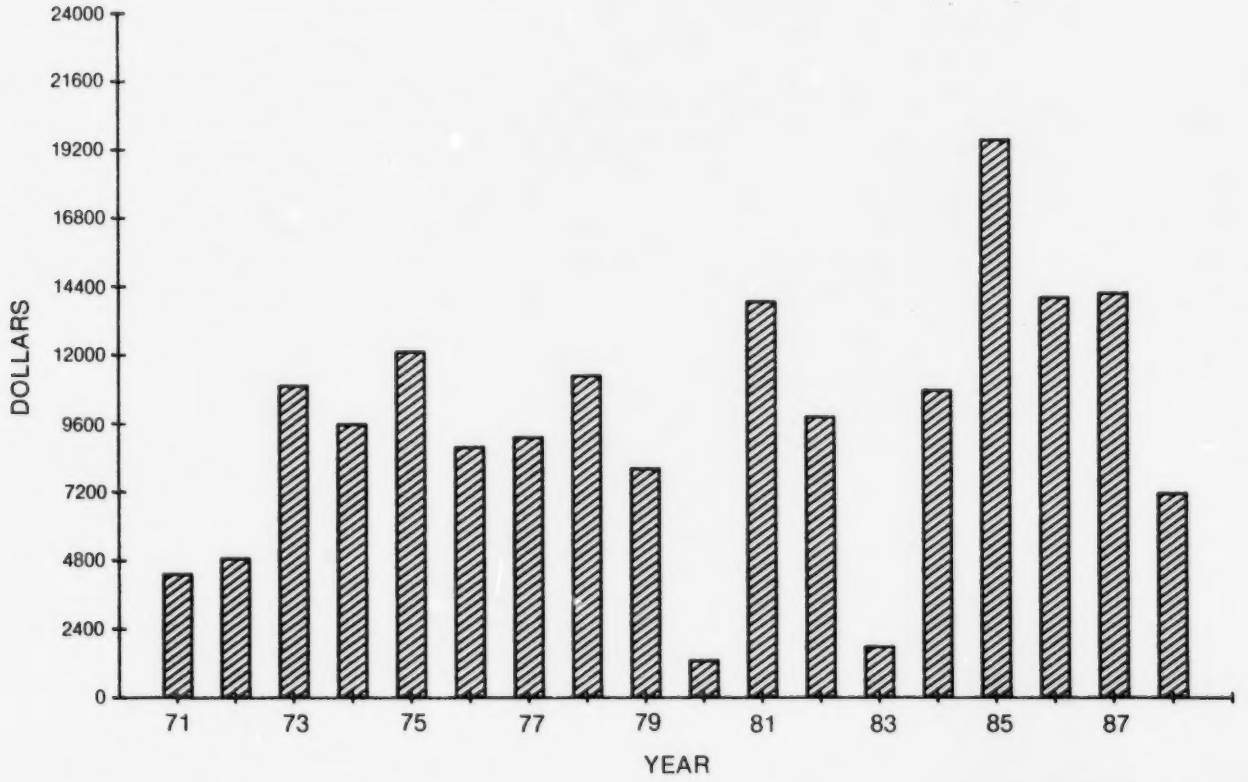
High real interest rates, low commodity prices, adverse weather conditions, a declining equity land base in recent years and management problems have all contributed to the current financial difficulties experienced by many Manitoba farmers. In 1987, an estimated 33 per cent of Manitoba farmers were in a financial situation which made continued operation uncertain. About 13 per cent of all farms were considered nonviable, eight per cent were classified as deteriorating financially, and 12 per cent were financially vulnerable.

FARM EFFICIENCY

Improved productivity in all sectors of the food system has greatly increased food production and lowered food prices over the past fifty years. Much of this increased efficiency is due to farmers. Each Manitoba farm now feeds 250 people, five times as many as fifty years ago. In addition, food prices have not increased as much as wages in Manitoba, so a consumer only has to work half as long now as he or she did fifty years ago to buy Manitoba produced meat, milk, eggs, bread and vegetables.

GRAPH 4

TOTAL NET INCOME PER FARM, 1971 - 1988



Datasource: Statistics Canada

CAPITAL INVESTMENT

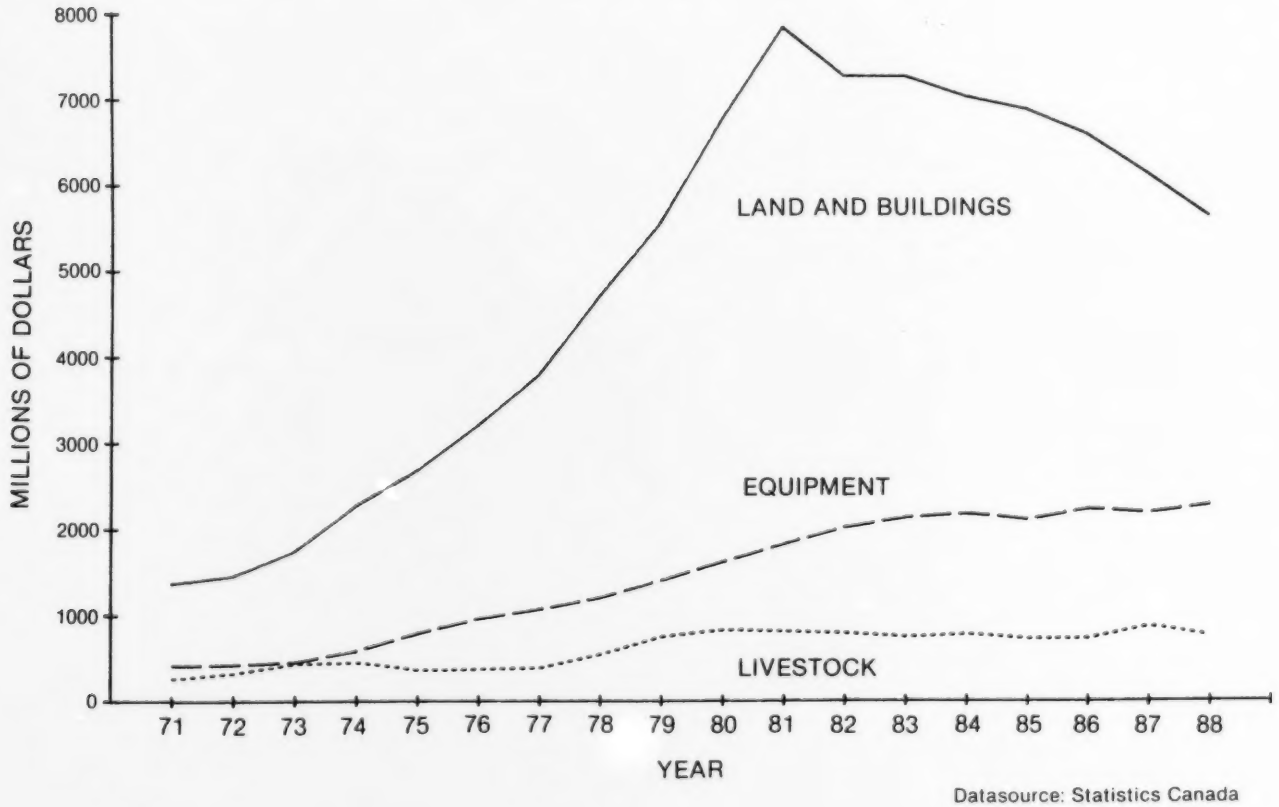
The total value of fixed capital used by Manitoba farmers in 1988 was almost $8.7 billion, or $321,100 per farm operation. This included $5.6 billion (65.0 per cent) for land and buildings, $2.3 billion (26.3 per cent) for machinery and equipment and $0.8 billion (8.7 per cent) for livestock and poultry. Since 1981, when land values peaked, the fixed capital investment in Manitoba agriculture has decreased by over 17 per cent.

A noticeable shift has occurred in the distribution of capital investment. Land and buildings now account for 65 per cent of total investment. This compares with 75 per cent in 1981, and about 70 per cent in 1976 for the same components. The change in the contribution of land to total investment can be attributed to the escalation of land prices in the late 1970s because of increased investment in land, followed by a decrease in land values in the mid-1980s. In 1988, the average value of farm land and buildings in Manitoba was approximately $726 per hectare ($294 per acre), eight per cent below the 1987 level of $791 per hectare ($320 per acre). Between 1971 and 1981, capital investment in Manitoba agriculture more than doubled every five years. However, since 1982, high real interest rates and low commodity prices have slowed capital investment growth in farming. Farm machinery sales in the province have also suffered.

In 1988, the ratio of Manitoba farm equity to assets was estimated at 0.80. By enterprise type, cash crop, dairy, hog and beef operations had equity to asset ratios of 0.80, 0.75, 0.75 and 0.83 respectively. Manitoba farmers had total assets estimated at $9.04 billion, liabilities of $1.81 billion and a net worth of $7.23 billion. Assuming farm sales are used as a proxy for farm size, then total liabilities as a percentage of total assets increased as farm size (total value of farm sales) increased. This percentage rose from a low of 12.2 per cent for small farms (less than $26,840 farm sales) to a high of 23.0 per cent for larger farms (farm sales over $85,750).

Chartered banks financed approximately 37 per cent of the total farm debt in Manitoba in 1987. The provincial and federal governments, through agencies such as

GRAPH 5 **CAPITAL INVESTMENT IN AGRICULTURE 1971 - 1988**



Datasource: Statistics Canada

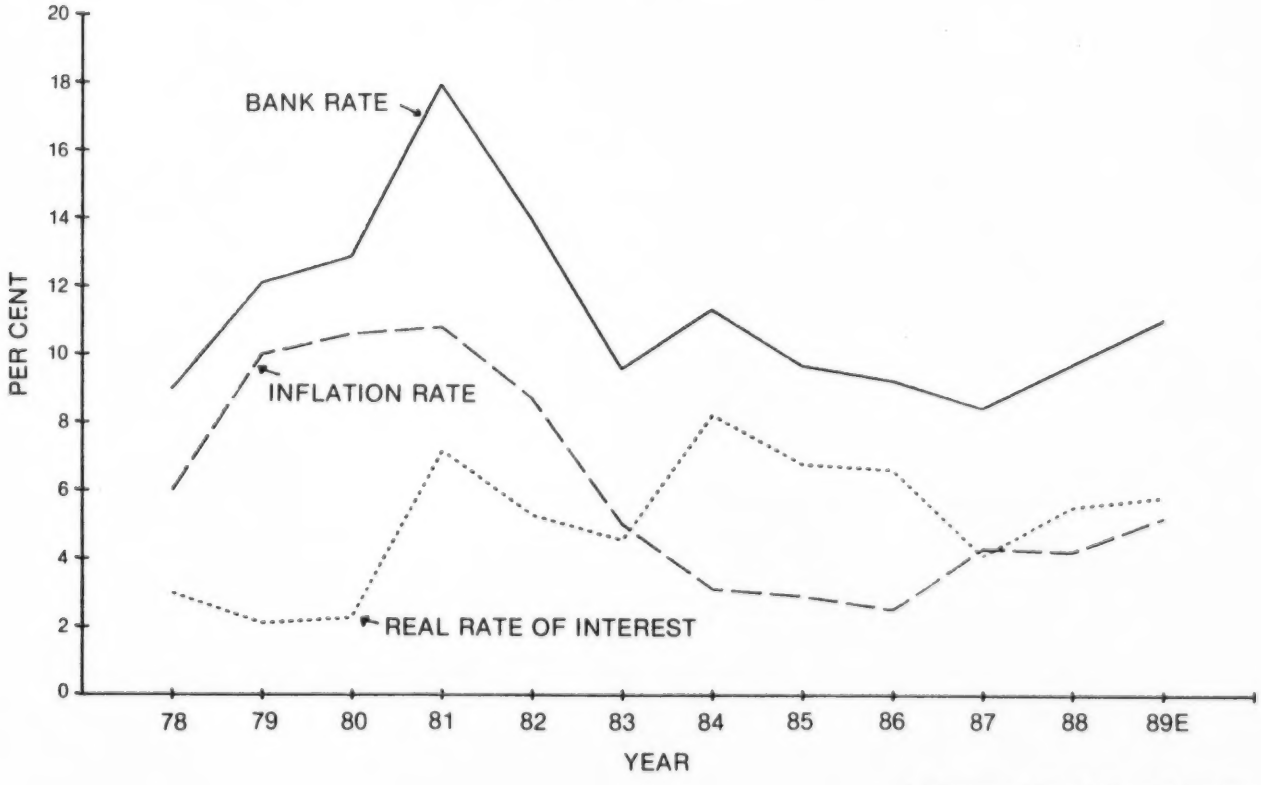
MACC (Manitoba Agricultural Credit Corporation) and the FCC (Farm Credit Corporation), financed 13 and 22 per cent of the provincial farm debt respectively. Credit unions financed 15 per cent of farm debt, while personal sources of credit, along with trust and insurance companies, accounted for 13 and 0.1 per cent respectively.

Established farmers who own their land and have low debt-to-asset ratios will likely survive the current economic situation. However, younger and beginning farmers, including those with low equity, face a more difficult financial situation. New farm operators often have limited finances to become established, and their low equity makes them a high risk to lending institutions. In many cases, MACC is the only source of financing for these higher-risk farmers. There were 224 farmers who had long-term loans totalling $12 million (other than for refinancing) approved by MACC for the fiscal year 1987-88. Of these, 92 per cent were younger than 40 years. The after-loan equity position of long-term borrowers was 46 per cent of the total capital invested in their farming enterprises.

Because of reduced farm incomes and the high cost of borrowing, farmers with low equity continue to face a serious challenge in continuing their farming operations. Due to increased financial pressure, some farmers are shifting their debt structure from short and intermediate-term to long-term to ease their repayment burdens. As farms become larger, operating debt financing becomes more important in their cost of operation.

The interest paid on farm debt in 1988 was estimated at $167.8 million. This was up by three per cent from 1987. Interest on debt as a percentage of total farm operating expenditure decreased from 17.6 per cent in 1981 to 11.4 per cent in 1986 and 12.3 per cent in 1988. As interest still forms a significant percentage of total farm operating expenditures, it appears that a high equity position could be as important as operating efficiency to assure continued solvency.

GRAPH 6 **BANK RATE, INFLATION RATE, REAL RATE OF INTEREST 1978 - 1989**



Datasource: Bank of Canada Review

OTHER AGRICULTURAL EXPENDITURES

Manitoba farmers have substantial operating expenditure requirements for such items as seed, feed, fertilizer and fuel. In 1983, total farm operating expenses (which included operating capital requirements and depreciation) were $1.54 billion. The 1988 total farm operating expense requirement was $1.64 billion, up six per cent from 1983 and down by less than one per cent from 1987. It is estimated that 1989 total farm operating and depreciation expenses will increase to about $1.80 billion.

Fertilizer: The total volume of fertilizer sold went from 616 100 tonnes in 1987 to 701 200 tonnes in 1988. Total fertilizer expenditures in 1988 were estimated at $176.1 million, down six per cent from 1987. Manitoba farmers used 39 per cent more fertilizer between 1983 and 1988, with fertilizer expenditures declining by six per cent over the five-year period.

Herbicides: In 1985 and 1986 the level of herbicide use in Manitoba was estimated at 3.8 and 4.7 million kilograms (8.4 and 10.4 million pounds) of active material respectively. Reduced use of wild oat herbicides contributed to a decrease of 25 per cent in total herbicide use in the province to 3.6 million kilograms (7.8 million pounds) in 1987. Use increased to 4.9 million kilograms (10.8 million pounds) in 1988.

Pesticides: Total farm pesticide expenditures in 1988 were estimated at $97.8 million, a decrease of nine per cent from 1987, but similar to the 1983 level.

Fuel: The total farm expenditure for diesel, gasoline and lubricants in 1988 was $123.9 million, down 11 per cent from 1987. Farm fuel rose from 10.9 per cent of total farm operating expenses in 1981 to peak at 13.1 per cent in 1983, but declined to 9.1 per cent in 1988. Primary agriculture consumes approximately 18 to 19 per cent of all fossil fuels used in Manitoba.

Machinery: Capital invested in farm machinery and equipment in 1983 was $2.13 billion. In 1988, this value was estimated at $2.28 billion, an increase of almost four per cent from the 1987 value.

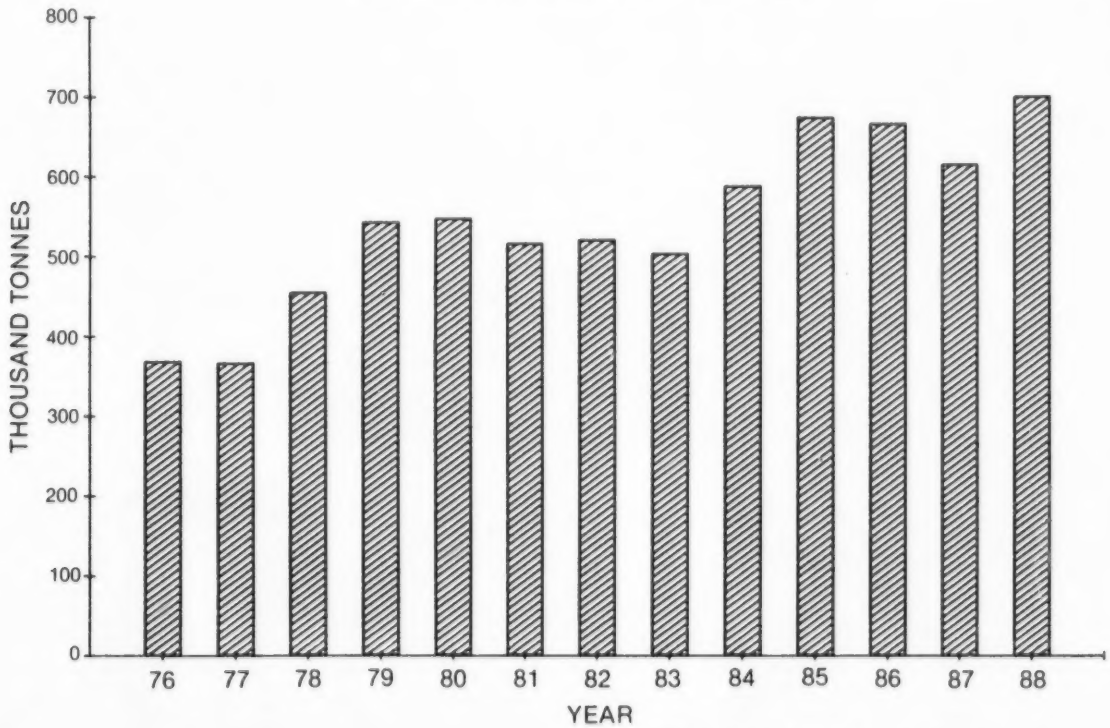
Repairs: In 1983, Manitoba farmers spent $121.9 million on equipment repairs. In 1988, expenditures were estimated at $135.5 million, a less than one per cent decrease from 1987.

Buildings: Farm expenditure for building repairs in 1988 was $31.1 million, four per cent more than in 1987 and 32 per cent above the 1983 level. Many farm buildings have been fully depreciated, but still remain serviceable.

Livestock: Total livestock expenditures by Manitoba farmers in 1988 were estimated at $211.1 million. This is up by 12 per cent from 1987 expenditures due to significantly higher feed costs in 1988. In comparison, the

GRAPH 7

FERTILIZER SALES, 1976 - 88



Datasource: Western Canada Fertilizer Association

total expenditure in 1983 was over $140.8 million. Livestock expenses in 1987 represented 13.6 per cent of total operating expenditures compared with 15.4 per cent in 1988.

Seed: In 1988, Manitoba farmers spent $43.5 million on seed compared with $45.0 million in 1983 and $44.4 million in 1987. Seed costs in 1987 and 1988 accounted for 3.2 per cent of total expenditures.

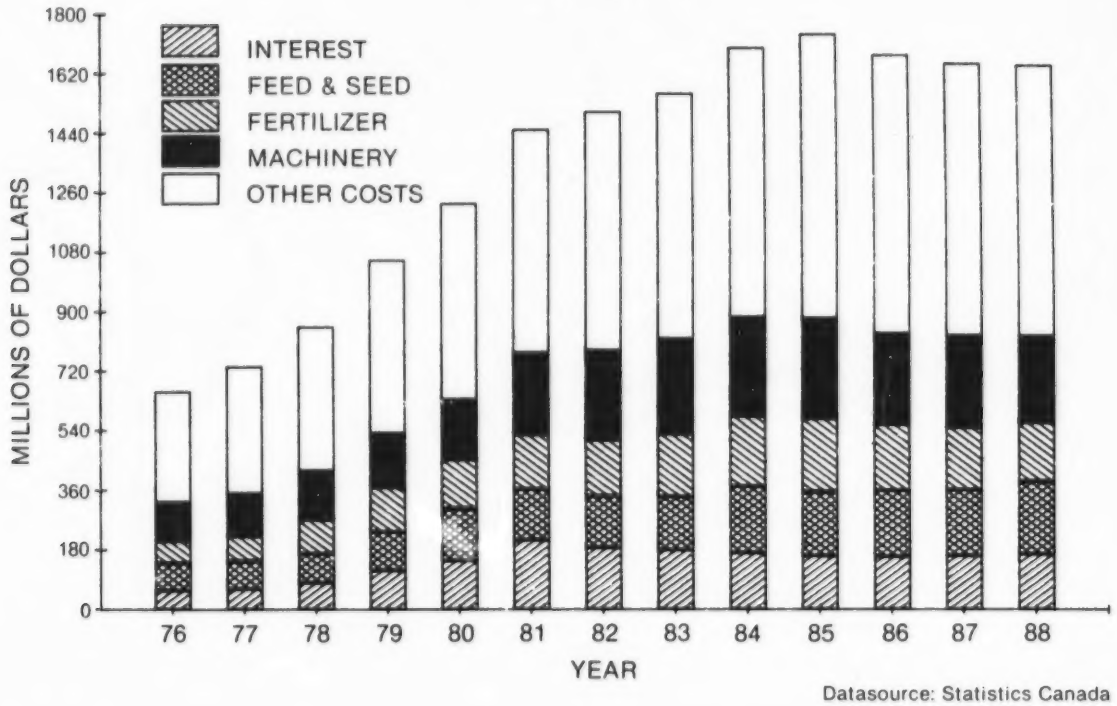
Other Expenditures: Other farm expenditures include taxes, wages, rentals, insurance, electricity, telephone, etc. Of the total $1.37 billion of farm expenditures in 1988 (excluding depreciation), other expenditures amounted to $381.2 million or 27.9 per cent of the total. This decrease of almost one per cent from 1987 was mainly due to a 33 per cent increase in stabilization premiums in 1988. In 1983, other expenditures accounted for $320.1 million, or 25.3 per cent of the total.

AGRICULTURAL PRODUCTION

Manitoba's farm cash receipts were estimated at $2.05 billion in 1988, a two per cent decrease from the previous year. Over 41.4 per cent of these receipts were derived from crop production, while 37.6 per cent came from livestock production, including the production of honey, fur, forestry products and P.M.U. operations. The remaining 21.0 per cent came from Crop Insurance, Western Grain Stabilization, the Special Canadian Grains Program, other stabilization payments and supplementary payments.

An increase in 1989 net government stabilization support and supplementary payments to farmers to compensate for low livestock prices and the drought in 1988 is expected to contribute to a one per cent rise in 1989 farm cash receipts.

GRAPH 8 **FARM CASH AND OTHER EXPENSES, 1976 - 1988**



Datasource: Statistics Canada

CROPS

Although southern Manitoba has the climate and soil to grow a wide range of crops, the traditional **grain crops** of **wheat** and **barley** occupy almost 55 per cent of the 4.7 million hectares of cropped area in the province. Together, these two crops contributed about 40 per cent of total farm cash receipts in the early 1980s. However, low grain prices until mid-1988 caused this contribution to decline to one third in 1985 and 1986 and less than one quarter in 1987 and 1988. The 1988 North American summer drought resulted in higher world prices for grains, but farm cash receipts from wheat and barley remained low because of significantly reduced yields throughout most of southern Manitoba. Wheat production dropped to 2.4 million tonnes in 1988, down by almost 40 per cent from 1987, while barley production fell by 46 per cent to 1.0 million tonnes.

Manitoba produces other grain crops, such as **oats, rye** and **mixed grains.** These crops occupied 230 800 hectares in 1988.

Flaxseed has been a relatively important crop since the 1940s, but other **oilseed crops,** such as canola and sunflowers have gained prominence since the early 1970s. The province produced 48 per cent of Canada's flaxseed, 88 per cent of the national sunflowerseed crop and 14 per cent of the canola crop in 1988. The area planted to **flaxseed** decreased by 16 per cent to 283 000 hectares in 1988. The flaxseed crop was affected by the drought in 1988 which caused production to fall by 51 per cent to 198 000 tonnes.

Canola production peaked at 635 000 tonnes in 1985, but a record area, 627 000 hectares, was planted to canola in 1988. The drought reduced yields by a third and production totalled 612 000 tonnes.

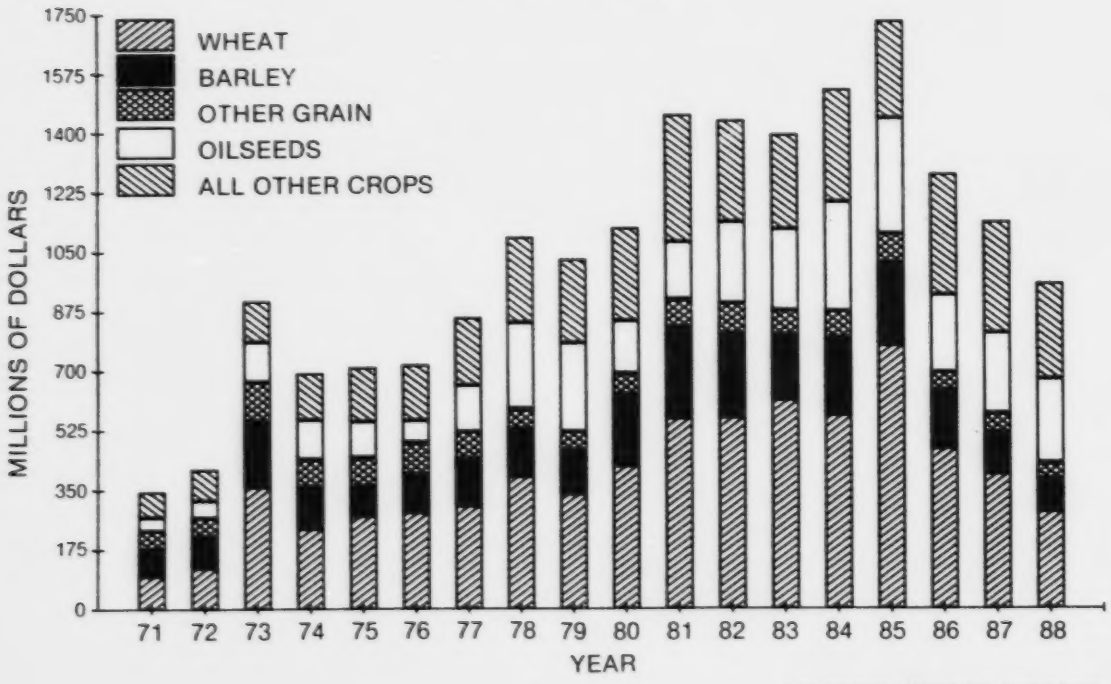
In 1979 Manitoba's **sunflower** area peaked at 153 800 hectares. However, lower prices and problems due to weather, disease and insects meant only 34 400 hectares were planted in 1988. 1988 sunflowerseed production was estimated at 42 600 tonnes, only one-fifth of the 1979 production.

The mix of crops and area seeded each year depends, to a large extent, on anticipated market prices relative to production costs. The area seeded to wheat in the province in 1989 is expected to increase by seven per cent to 2 094.1 million hectares. Higher barley prices and a low carryover of stocks could encourage a ten per cent increase in the area of barley to 668 000 hectares in 1989. Plantings of flaxseed are expected to increase in response to improved prices, but the canola acreage could decrease by 26 per cent to 465 000 hectares.

Manitoba is not only an important source of grains and oilseeds, but is a major area for the production of **special crops** in Canada. One of two major buckwheat-

GRAPH 9

FARM VALUE OF CROP PRODUCTION, 1971 - 1988

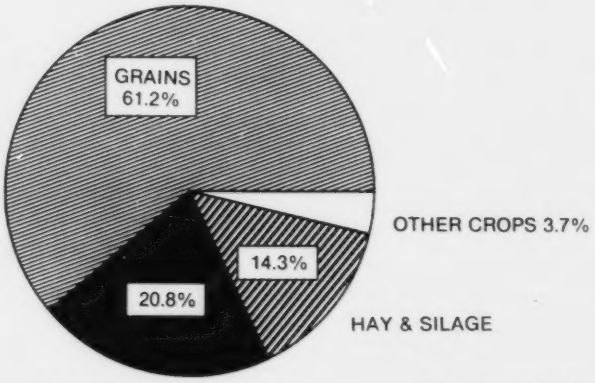


Datasource: Manitoba Agriculture

producing provinces, Manitoba supplied over 40 per cent of the Canadian crop in 1988 with an estimated value of $3.1 million. Manitoba's drought-reduced dry field pea production, valued at only $12.3 million, was estimated at 22 per cent of the national crop in 1988, while 31 per cent of Canada's sugar beets, 11 per cent of the lentils and seven per cent of the mustard seed were produced in Manitoba. Overall, special crop plantings in 1989 (excluding corn) are expected to be six per cent below the 1988 level, mainly due to the smaller field pea area more than offsetting increased areas of mustard-seed, sugar beets and canary seed. Manitoba's grain corn area is expected to increase by six per cent to 34 400 hectares in 1989.

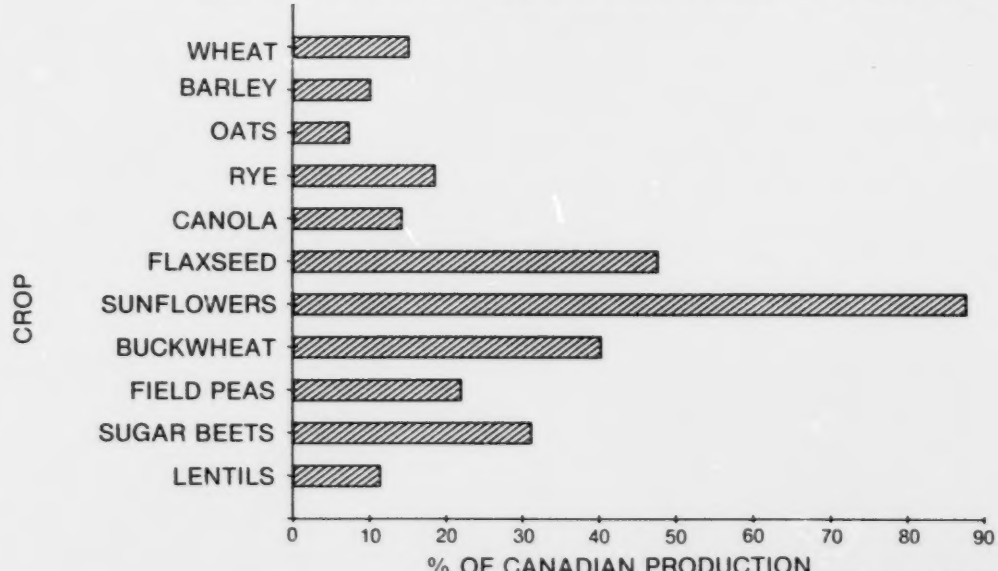
Manitoba's vegetable industry, although still relatively small compared to the major producing provinces of Ontario and British Columbia, has grown in importance over the years, particularly in terms of employment and import substitution. Manitoba had 148 potato producers, 37 major vegetable producers and over 250 market gardeners who employed more than 2,000 full-time and seasonal farm workers in 1988. The drought reduced yields in 1988 so potato and vegetable production was valued at only $39 million, down from $62 million in 1987. In addition, the production of fruit, mushrooms, flowers, nursery products and sod in Manitoba amounted to over $38 million in 1988.

GRAPH 10 **AREA OF CROPS PLANTED IN MANITOBA, 1988**



Datasource: Statistics Canada

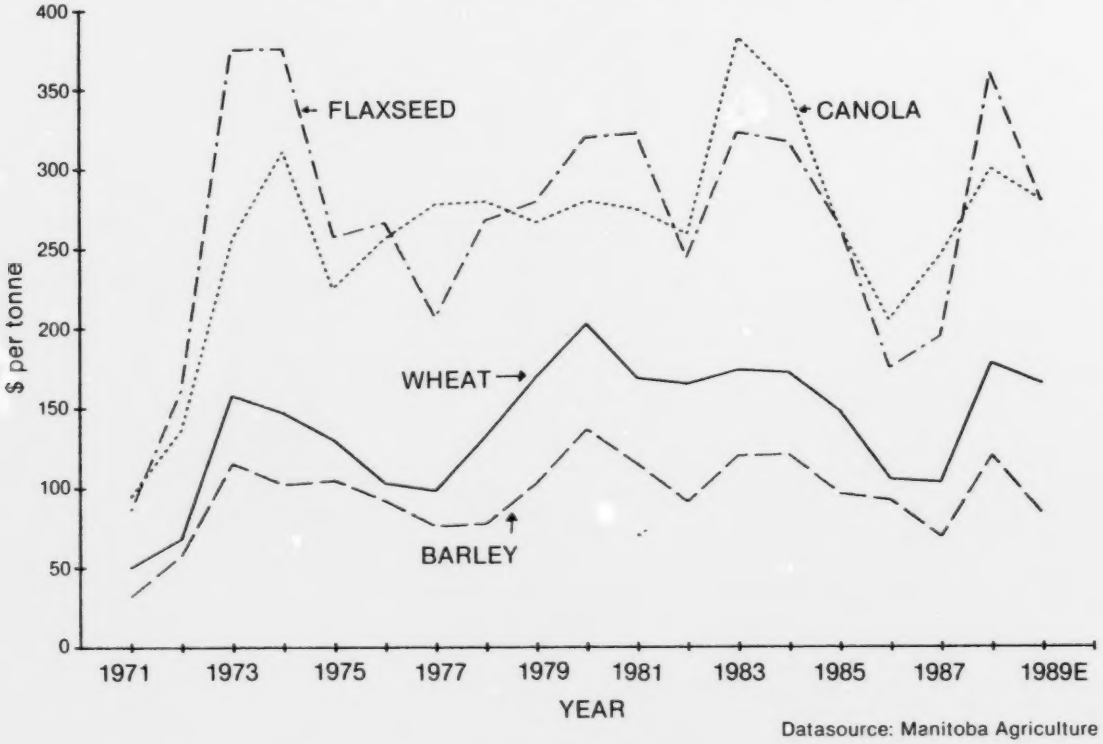
GRAPH 11 **MANITOBA CROP PRODUCTION AS A PERCENTAGE OF CANADIAN PRODUCTION, 1988**



Datasource: Statistics Canada

GRAPH 12

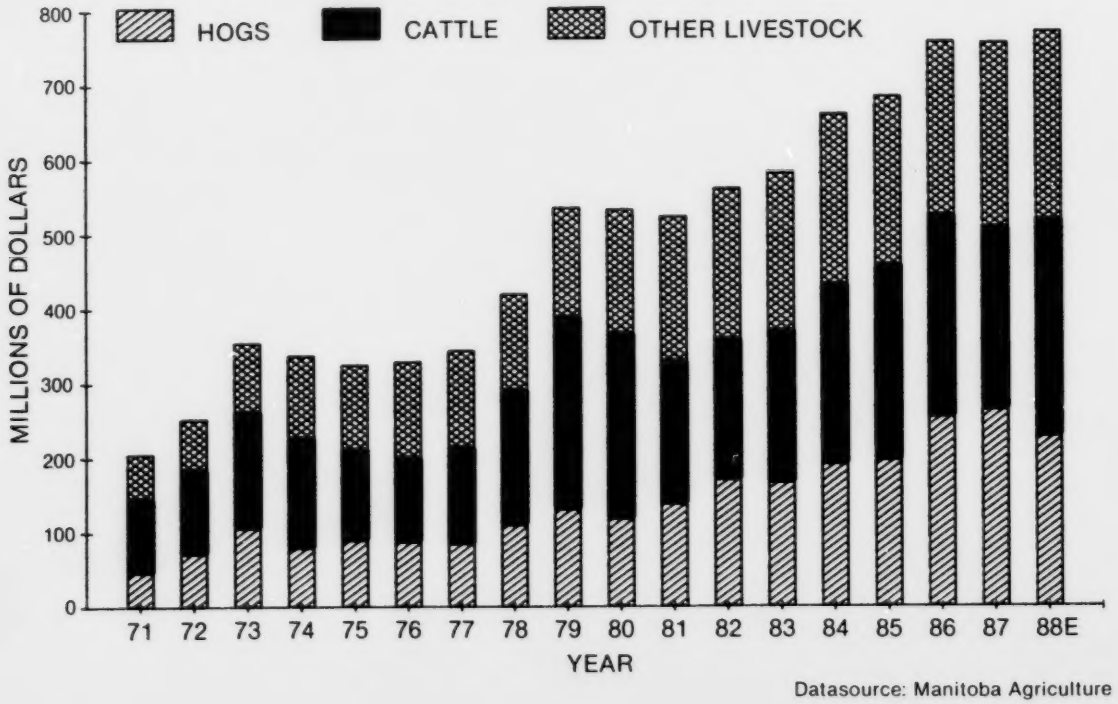
PRICES OF SELECTED CROPS, 1971 - 1989



Datasource: Manitoba Agriculture

GRAPH 13

FARM VALUE OF LIVESTOCK PRODUCTION, MANITOBA 1971 - 1988



Datasource: Manitoba Agriculture

LIVESTOCK

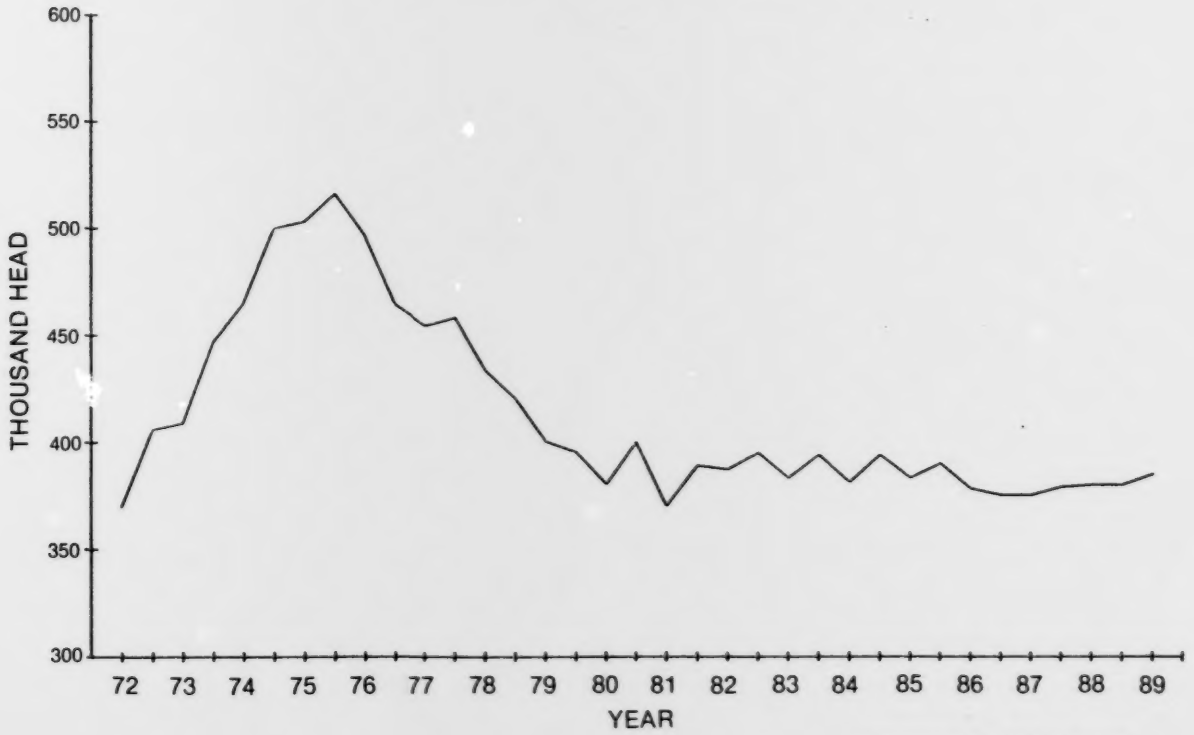
The livestock industry in Manitoba contributed 37.6 per cent of the total farm cash receipts in 1988, down from 38.9 per cent in 1987, and down from 38.3 per cent, the average of the previous 10 years. Marketings of cattle and calves amounted to almost 39 per cent of livestock product value and provided 14.6 per cent of total 1988 farm cash receipts. This made beef the second largest farm commodity next to wheat. The province has over eight per cent of all cattle and calves in Canada, over 11 per cent of the beef cows, almost five per cent of the dairy cows, over 11 per cent of the hogs, three per cent of the sheep and lambs, seven per cent of the hens and chickens, nine per cent of the turkeys, 95 per cent of the geese, four per cent of the ducks and 11 per cent of the egg production. Only four per cent of Canada's population lives in Manitoba, thus the province is a surplus supplier of most livestock products.

Prices for Manitoba's cattle and hogs are dependent on prices in the United States and, to a lesser extent, in eastern Canada. Thus local prices tend to be variable, depending on the supply and demand for red meats particularly in the major markets of the U.S., Ontario and Quebec. This situation has in the past, made management decisions difficult for local producers, who tended to suffer from price and income instability. National tripartite stabilization plans have been introduced to help limit the effect of price fluctuations.

Declining North American per capita beef consumption (since the peak year of 1976), and variable profitability from beef production resulted in a decline in the Manitoba **cattle** herd from 1977 to 1987. Encouraged by higher calf prices in 1987, the beef cow herd increased by over one per cent in 1988. The number of Manitoba-origin cattle and total cattle slaughtered in Manitoba packing plants increased by over 10 per cent from 1984 to 1985. Total cattle slaughterings increased by a further 12 per cent to 380 900 head in 1986. However, the closing of Canada Packers' slaughter facility in April, 1987 reduced local slaughter capacity by about 40 per cent. Manitoba inspected slaughter fell by 37 per cent to 241,600 head in 1987 and again by 24 per cent to 183,300 head in 1988.

GRAPH 14

NUMBER OF BEEF COWS IN MANITOBA
January 1 and July 1, 1972 - 89



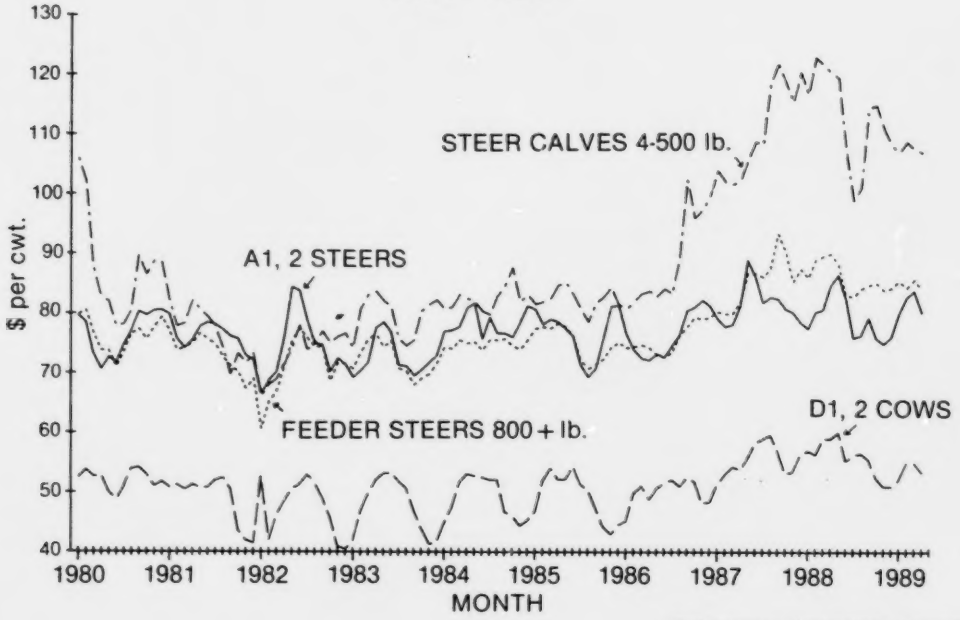
Datasource: Statistics Canada

Manitoba **hog** marketings rose to 1,352,000 head in 1971, but decreased to 835,000 head in 1976. Price stabilization plans introduced since 1981 encouraged herd expansion and by 1988, Manitoba hog marketings had reached over two million head with a value of $228 million. Manitoba's share of the Canadian hog market declined from 13 per cent in 1971 to less than nine per cent in 1982 as hog production shifted to the central Canadian provinces, particularly Quebec. However, by the end of 1988, Manitoba's share of national slaughter had increased to over 12 per cent.

The **sheep** industry is much smaller than that of cattle

GRAPH 15

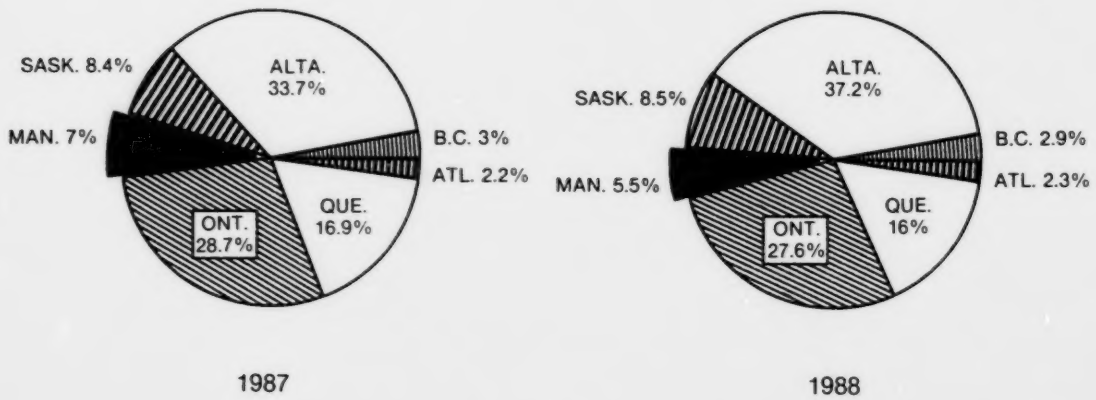
WINNIPEG CATTLE PRICES BY MONTH 1980 - 1989



Datasource: Agriculture Canada

GRAPH 16

FEDERAL/PROVINCIAL CATTLE SLAUGHTER BY PROVINCE, 1987 and 1988



Datasource: Agriculture Canada

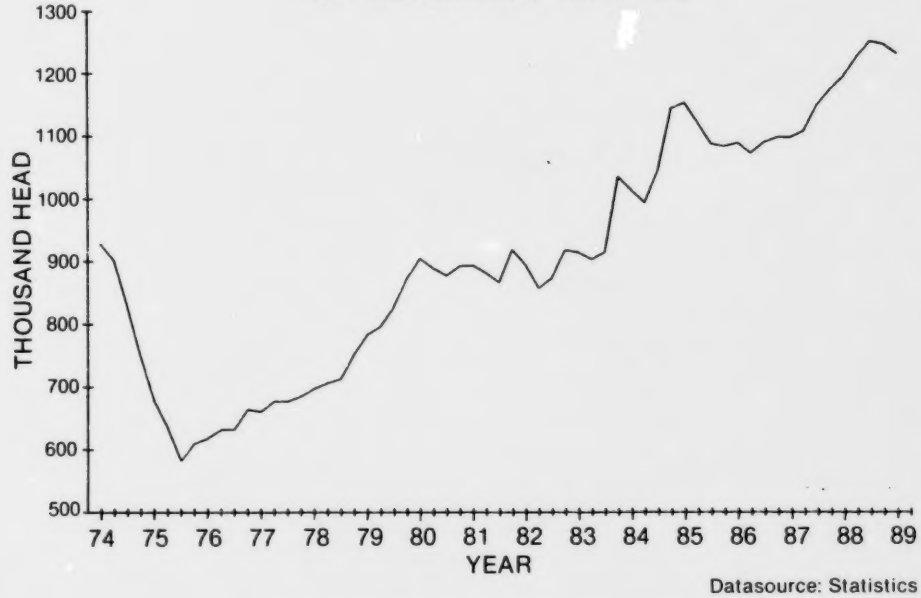
and hogs. The number of sheep on Manitoba farms peaked at 81,300 head in 1981, but declined to 22,000 head in 1988. Only about 20 per cent of the sheep produced in Manitoba are slaughtered in provincial-inspected packing plants located in the province. A large number of producers sell their product privately to the consumer.

In 1988, Manitoba's 66,000 **dairy** cows produced milk and cream valued at $129.2 million (including supplementary payments). This was an increase of 6.5 per cent from the 1987 level.

Farm receipts for **poultry and eggs** produced in the province amounted to $102.7 million in 1988, up by seven per cent from the previous year.

GRAPH 17

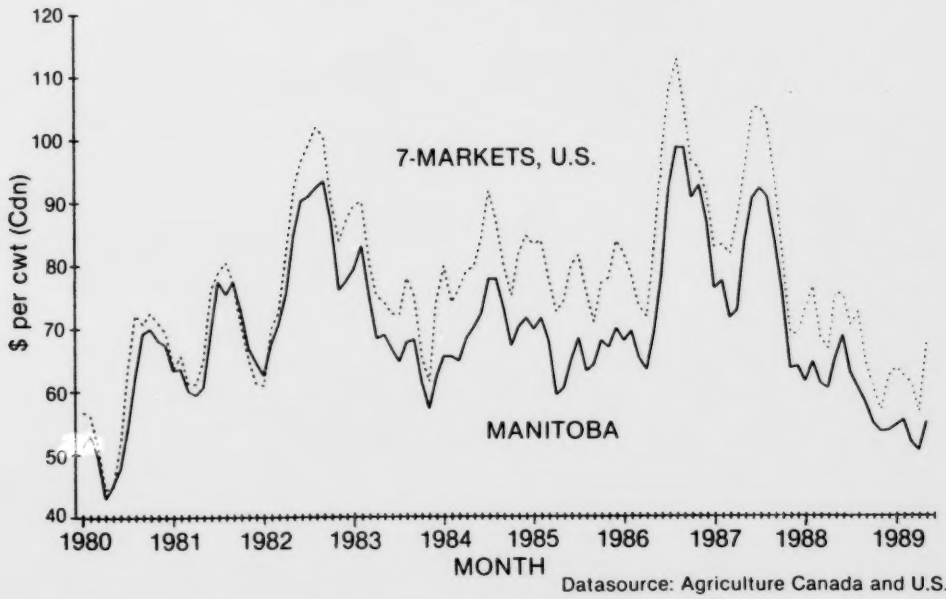
MANITOBA HOGS ON FARMS BY QUARTER, 1974 - 89



Datasource: Statistics Canada

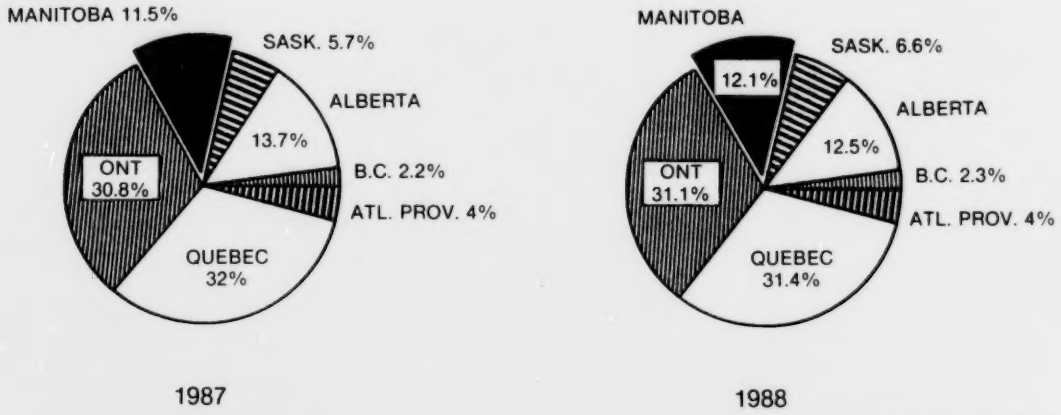
GRAPH 18

HOG PRICES BY MONTH, 1980 - 89
Index 100 dressed weight



Datasource: Agriculture Canada and U.S.D.A.

GRAPH 19 **HOG SLAUGHTER BY PROVINCE OF ORIGIN 1987 and 1988**



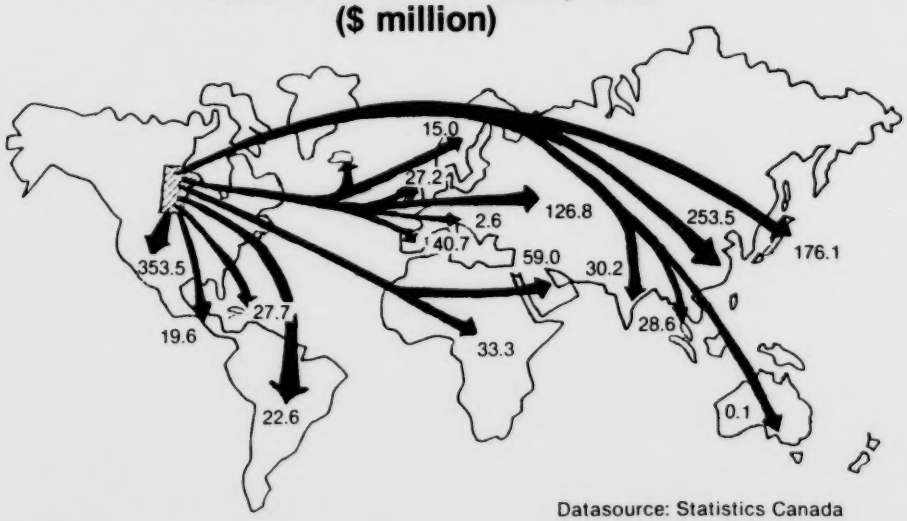
Datasource: Agriculture Canada

AGRICULTURAL TRADE

Manitoba's agricultural exports are shipped mainly in unprocessed or semi-processed states to other Canadian provinces and 99 countries. Manitoba uses about 12 per cent of the wheat and almost 50 per cent of the barley produced in the province, the remainder being exported to eastern Canadian markets or overseas. About 38 per cent of Manitoba slaughter cattle and approximately 78 per cent of the hogs marketed in 1988 were sent out of the province, either live or in a processed state. Over 53 per cent of the turkey, almost all the chicken and about 48 per cent of the eggs produced in Manitoba in 1988 were consumed locally. Less than one per cent of Manitoba's eggs were exported to other countries as most out-of-province shipments went to other Canadian provinces. Almost 90 per cent of Manitoba geese were shipped to other provinces, the United States, West Germany and Switzerland. In 1988, about $229 million of Manitoba livestock and livestock products were sent out of the country, while over $762 million of unprocessed grains, oilseeds and special crops were exported. Grain exports are one of the largest single sources of foreign exchange earnings for Canada.

Canada imported $118 million worth of cheese, $648 million of fresh vegetables, $240 million of processed vegetables, $250 million of cereal and bakery products, and $626 million of meat and meat products in 1988, much of which could have been produced in Canada and, possibly, Manitoba. However, in many instances, given the labour costs and better weather conditions in exporting countries, it may not be economically feasible to reduce imports of some foods, such as fresh vegetables in winter.

FIGURE 1 **MANITOBA EXPORTS OF AGRICULTURAL PRODUCTS AND FOOD, 1988 ($ million)**



Datasource: Statistics Canada

IMPACT OF AGRICULTURE ON THE PROVINCIAL ECONOMY

While the relative importance of primary agriculture in the provincial economy has varied significantly over the past ten years, the total economic impact of the agricultural industry has been positive.

CONTRIBUTION OF FOOD PROCESSING

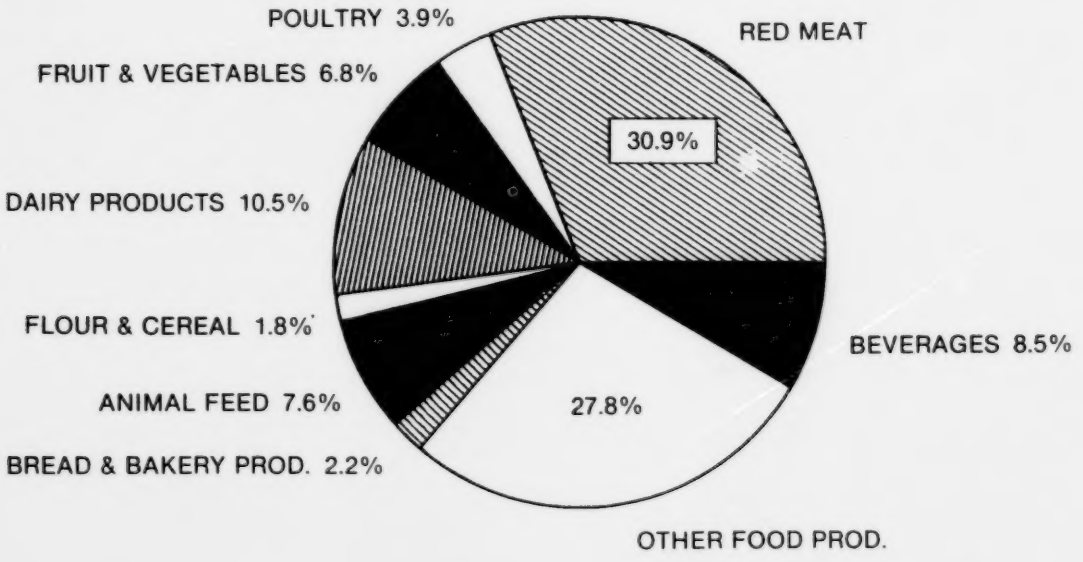
The food and beverage processing industry includes the slaughtering and/or processing of meat and poultry, fruit and vegetables, cereal products, dairy products, vegetable oils, feed, seed, sugar and beverages. It is the most important manufacturing industry in Manitoba, producing $2.32 billion of goods and services in 1986, or about 36 per cent of the total manufacturing output in the province. In 1986, the food and beverage processing industry employed 10,010 administrative, production and related workers with wages of $254.6 million. Over $1.68 billion worth of inputs went into the industry in 1986 and generated an added value of $614 million.

The largest sector, meat and poultry slaughtering and processing, employed almost 3,640 people with wages totalling $92 million in 1986. Principal raw inputs, cattle and hogs, account for about 80 per cent of the meat processing industry's total cost of materials and supplies of $634 million. Ninety-nine per cent of the hogs and 65 per cent of the cattle slaughtered in the province in 1988 originated in Manitoba. Over 60 per cent of the sector's output consists of fresh pork and beef, while other processed meats comprise over 20 per cent.

Technological changes in the production of processed meats are mainly responsible for the continuing rationalization of the meat packing industry. A new hog slaughtering plant, built in Neepawa, began operations in October, 1986. Canada Packer's closed its slaughter plant in early 1987, which reduced Manitoba's cattle slaughter capacity by about 40 per cent. There has been some consolidation of turkey and chicken slaughterings as well as increased productivity in recent years. Manitoba continues to produce deboned turkey meat to supply part of the growing consumer demand for this product, particularly in Japan. Exports of turkey meat rose significantly in 1988.

Other important Manitoba food processing sectors include dairy, bakery, animal feed, beverage and fruit and vegetable processing. The province's feed industry output was almost $177 million, employing 600 administrative and production staff in 1986. Principal inputs for the industry are barley, wheat, meat meal, corn and canola meal. Much of the corn and canola meal produced in Manitoba is used locally by the feed in-

GRAPH 20 **MANITOBA FOOD AND BEVERAGE PROCESSING INDUSTRY, 1986**



1986

Datasource: Statistics Canada

dustry. Soybean meal is imported from the United States.

Manitoba has two oilseed crushing plants located at Altona, and Harrowby on the Saskatchewan border. Almost all the sunflowerseed and canola crushed at Altona comes from Manitoba. Output from the plants includes bulk crude and refined oil, bulk vegetable oil, retail pack refined oil, hulls and screenings. About 85 to 90 per cent of the total production from the Altona plant is marketed outside the province, primarily in central Canada. The plants reduced output in 1988 because of drought-reduced crop production and competition from the European Economic Community.

The Manitoba Sugar Company plant employs approximately 250 full and part-time staff. The plant processes only Manitoba sugar beets, with the entire provincial crop produced under contract to the plant. In 1988, provincial sugar beet production was affected by the drought and amounted to only 227 000 tonnes, a decrease of almost 46 per cent from the record level of 424 000 tonnes in 1987. The plant's primary product is granulated white sugar, marketed in either liquid or dry form as part of an extensive line of sugar products. In normal years, approximately 50 per cent of the product is used directly by consumers, most of whom are in Manitoba. By-products include beet pulp and molasses used for livestock feed and industrial purposes, much of which is exported from the province.

The distillery at Gimli employs 84 people and uses about 38 100 tonnes (1.5 million bushels) of grain corn annually. Establishment of the plant at Gimli was based on the availability of high quality and abundant supplies of water and the use of Manitoba-grown grain corn. Between 1980 and 1984, Manitoba farmers supplied the bulk of the high quality corn required by the distillery. In 1985 and 1986 Manitoba grain corn production and quality was poor which resulted in virtually all the corn requirements for the distillery being met by U.S. suppliers. However, in 1987 and 1988 increased producer interest in growing corn resulted in a larger portion of the distillery corn requirements being met by Manitoba supplies.

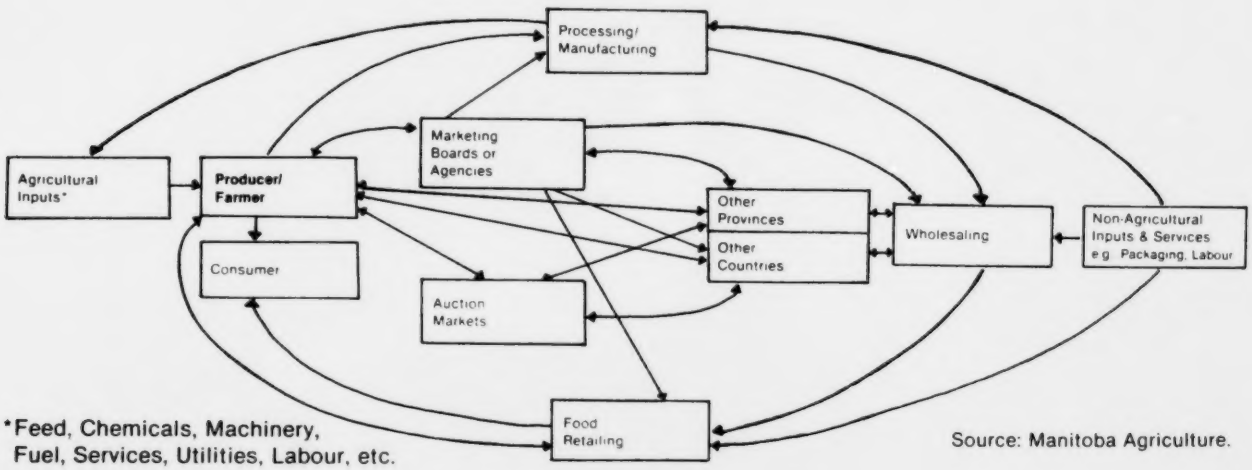
CONTRIBUTION OF AGRICULTURAL INDUSTRIES

In 1986, there were 39 implement manufacturing companies directly associated with agriculture. The companies employed 1,835 workers, paid $45.0 million in wages and salaries and produced $169.4 million worth of equipment. In the manufacture of implements, the companies in turn purchased $107.1 million in inputs and contributed $63.1 million in value added to the final product. The total value of this contribution to the provincial economy is not solely attributable to Manitoba agriculture. However, it nonetheless indicates the significance of this sub-unit to the agricultural sector of Manitoba's economy.

In addition to the 39 companies directly linked to agricultural equipment manufacturing, numerous firms are more indirectly associated with the agriculture equipment industry. These firms produce inputs for agriculture as a secondary output of their operation or as an input into a larger agricultural manufacturing operation. The total value of this contribution to the agriculture sector in 1986 was estimated at $140 million. The associated labour force was estimated at over 1,100.

In Manitoba, 394 licensed dealer establishments were selling farm machinery and associated equipment and providing service facilities in January, 1989. In addition, 46 licensed vendors supplied farm machinery and equipment repair parts to licensed dealers in the province. A number of unlicensed facilities provided repair services for farm equipment. Although statistics are not available on the total value of sales and servicing by this unit, it makes a further significant contribution to the agricultural sector of the economy.

FIGURE 2 **MANITOBA AGRI-FOOD SYSTEM**



*Feed, Chemicals, Machinery, Fuel, Services, Utilities, Labour, etc.

Source: Manitoba Agriculture.

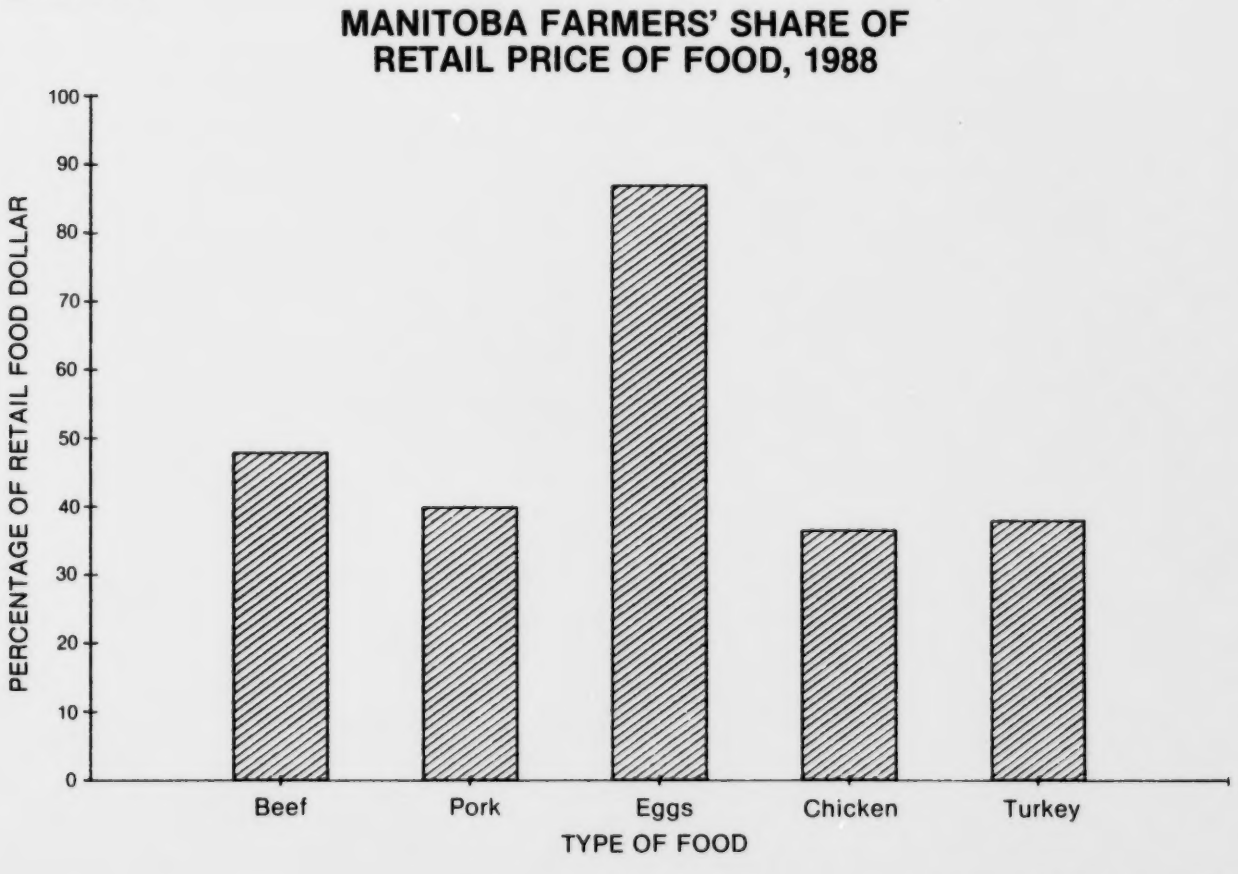
CONTRIBUTION OF SERVICE SECTOR

Manitoba agriculture depends on various service industries. These industries include transportation, construction, finance, insurance and real estate. An estimated eight per cent of total provincial transportation expenditures involved the movement of agricultural products, raw or processed. About eight per cent of Manitoba's construction takes place on farms or is for agriculture-related industries. Farm expenditures on financial, insurance or real estate services amounted to approximately 12 per cent of total expenditures for these services. In addition, both federal and provincial governments provide farmers with services such as extension, regulatory, research, development, financial and infrastuctural. Manitoba farms used 9.9 per cent of the total electric power and about half of the chemicals consumed in the province in 1987.

Although some of the food consumed by Manitobans is imported from other provinces or countries, over 55 per cent of the food sold by Manitoba's grocery and other food stores is derived from products grown and processed in Manitoba. Thus, a portion of the retail margins from these stores can be included with agriculture's contribution to the provincial economy. In 1988, Manitoba's 1,249 grocery or other food stores had over $1.60 billion in total sales volume, an increase of 5.6 per cent from the previous year. Gross margins and net profits amounted to about 23 per cent ($360 million) and 1.9 per cent ($30 million) respectively. It is estimated that 55 per cent ($200 million) of value added to foods purchased by retailers, is an indirect contribution of Manitoba agriculture to the economy. Food wholesaling activities also contribute to the economy.

For livestock products such as beef, pork, chicken, turkey and eggs, approximately 30 to 90 per cent of the consumer's food dollar goes to the livestock producer, depending on the extent of the processing and merchandising required for each commodity. An egg producer receives over 87 per cent of the retail price of eggs, while a chicken producer receives about 35 per cent of the amount a consumer pays for chicken. Processing and merchandising costs and wastage are greater for chicken than for eggs.

GRAPH 21



Datasource: Agriculture Canada

TOTAL IMPACT OF AGRICULTURE

One measure of provincial output is the Gross Domestic Product at factor cost, basically an aggregate of net profits and incomes, including wages, depreciation and investment income. Agriculture's direct contribution to the GDP increased to 10.4 per cent in 1973, but declined to 7.8 per cent in 1976, 7.3 per cent in 1981, 6.9 per cent in 1982 and 4.6 per cent in 1983. Net farm income improved and primary agriculture's contribution to the GDP rose to 6.4 per cent in 1984 and to 7.5 per cent in 1985, but declined to 5.3 per cent in 1986. Increased government assistance, particularly to grain producers, resulted in a contribution to the GDP of 5.2 per cent in 1987 and 4.4 per cent in 1988. Without government assistance, the contribution in both years would have been 2.6 per cent.

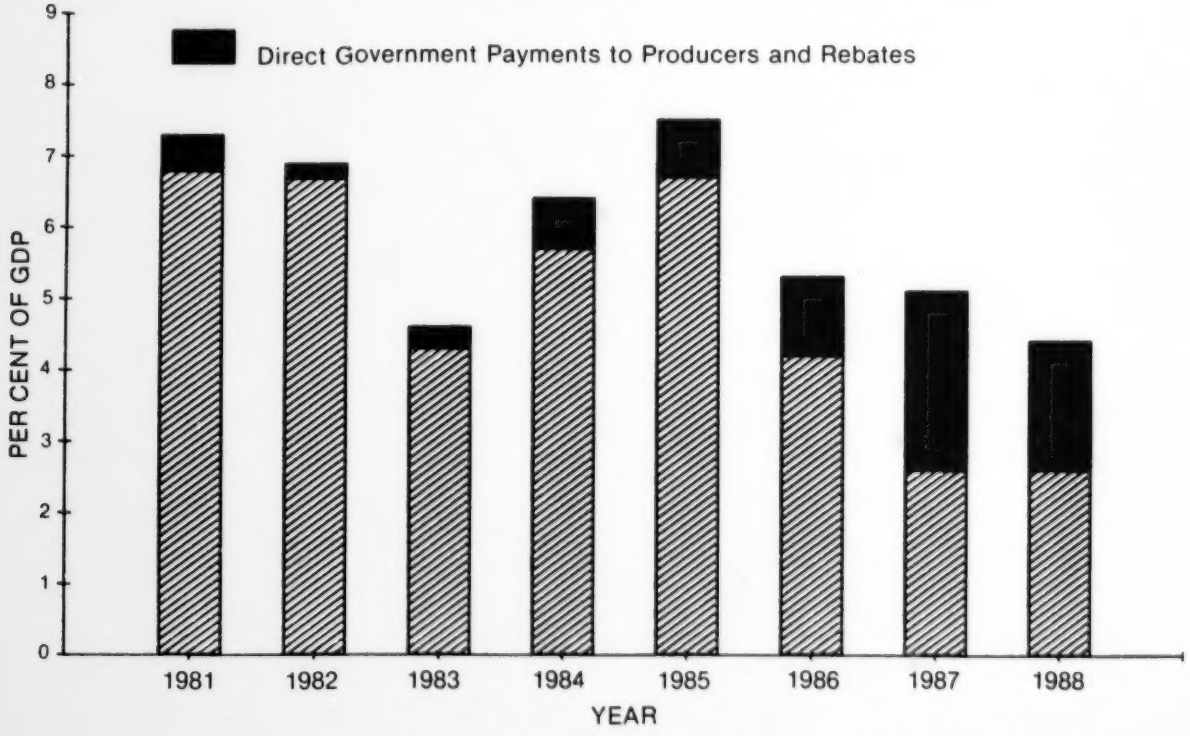
Agriculture also makes an indirect contribution to the provincial economy through income derived from agriculture-connected industries. These include the food processing industry, industries which supply inputs to agriculture, as well as wholesale, retail and other service sector components which supply services to farmers and agriculture-related workers. When agriculture's indirect contribution to the GDP was added to its direct contribution, an estimated 10.9 per cent of Manitoba's GDP was attributed to agriculture in 1988, compared to 12.3 per cent in 1987 and 13.0 per cent in 1986. For every dollar of net income produced by primary agriculture in Manitoba, $1.62 is generated in the overall Manitoba economy. Agriculture, directly or indirectly, accounted for about one dollar in nine of production in Manitoba's economy in 1988.

Another method of assessing agriculture's impact on Manitoba's economy is to compare the added value for agricultural inputs to that for the goods producing sector as a whole. In 1988, 15.7 per cent of total added value was provided by agriculture compared with 19.0 per cent a year earlier.

In 1988, 37,000 persons were directly employed in Manitoba agriculture. In addition, 33,000 persons were employed in other areas of the provincial economy as a direct result of the agricultural industry, bringing total employment generated by agriculture to 14.2 per cent of Manitoba's labour force in 1988. This means that about one job in seven was the result of agriculture production. For every job lost on farms in 1988, almost one job was lost in other areas of the Manitoba economy. In addition to stimulating local employment, agriculture in Manitoba is directly responsible for about 26,000 jobs in other parts of Canada.

GRAPH 22

CONTRIBUTION OF PRIMARY AGRICULTURE TO MANITOBA GDP 1981 - 88



Datasource: Manitoba Bureau of Statistics